

What is Claimed is

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1. A microcomputer provided with a flash memory and having a self-programming function of rewriting a program stored in said flash memory, comprising:

5 a rewrite program area for storing a program for a rewriting processing procedure for said flash memory; and

10 a controller for forming a plurality of flag areas locally in said flash memory when the rewriting program stored in external storage means or said rewrite program area is written into said flash memory, performing determination of completion of a plurality of stages of rewriting processing or determination of whether the plurality of stages are good or bad and recording results of the determination into the respective flag areas.

2. A microcomputer provided with a flash memory according to claim 1, wherein said flash memory includes a plurality of blocks each of which is an erasable unit and includes a data area and a flag area, and said
5 controller maps the data areas of the plurality of blocks to successive addresses.

3. A microcomputer provided with a flash memory and having a self-programming function of rewriting a program stored in said flash memory, comprising:

a rewrite program area for storing a program for a

5 rewriting processing procedure for said flash memory;

rewriting means for forming a plurality of flag areas locally in said flash memory when the rewriting program stored in external storage means or said rewrite program area is written into said flash memory; and

10 a controller for performing determination of completion of a plurality of stages of rewriting processing or determination of whether the plurality of stages are good or bad and recording results of the determination into the respective flag areas through said
15 rewriting means.

4. A microcomputer provided with a flash memory and having a self-programming function of rewriting a program stored in said flash memory, comprising:

a rewrite program area for storing a program for a
5 rewriting processing procedure for said flash memory;

rewriting means for forming a plurality of flag areas locally in said flash memory when the rewriting program stored in external storage means or said rewrite program area is written into said flash memory;

10 a controller for performing determination of completion of a plurality of stages of rewriting processing or determination of whether the plurality of stages are good or bad and recording results of the determination into the respective flag areas through said

15 rewriting means; and

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flag state notification means for comparing, when
power supply is made available after the rewriting is
completed, values read out from said flag areas with
expected values for said flag areas stored in advance and
20 notifying said controller of results of the comparison.

5. A microcomputer provided with a flash memory
according to claim 3, wherein said flash memory includes
a plurality of blocks each of which is an erasable unit
and includes a data area and a flag area, and said
5 rewriting means maps the data areas of the plurality of
blocks to successive addresses.

6. A microcomputer provided with a flash memory
according to claim 4, wherein said flash memory includes
a plurality of blocks each of which is an erasable unit
and includes a data area and a flag area, and said
5 rewriting means maps the data areas of the plurality of
blocks to successive addresses.

7. A method of storing a program into a flash
memory of a microcomputer provided with said flash memory
and having a self-programming function of rewriting the
program stored in said flash memory, wherein
5 a plurality of flag areas are formed locally in said

flash memory when a rewriting program is written into said flash memory, and determination of completion of a plurality of stages of rewriting processing or determination of whether the plurality of stages are good or bad is performed, whereafter results of the determination are recorded into the respective flag areas.

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